

# 20% energy reduction with advanced power management

*With an ever increasing need for companies to manage and reduce their CO2 emissions, Dutch water engineering pioneer Vanderkamp offers a solution that ensures the most efficient use of our resources: a new generation of innovative power management systems that can reduce the energy consumption of pumping installations by at least 20%. "Power management is not just about cost-cutting; it's about resource efficiency, especially in dynamic settings like temporary pumping systems. This aligns perfectly with our vision for a greener future," comments Menno van Veen, Engineer and Head R&D at Vanderkamp.*

## Power management for temporary pumping systems

Given the challenges related to the UK's aging water infrastructure, climate change, increasing demand for water, stricter regulations, and rising energy costs, the demand for temporary pumping systems is growing in the UK, and its power management becomes a focal point of consideration. "Our innovative power management systems are designed explicitly for the water industry", says Menno. "Decades of field experience helps us to understand exactly what the industry needs, and with our focus on research and development, we have created advanced solutions that offer both operational excellence and a sustainable use of resources."

## Resource-efficient solutions that save energy

At its core, Vanderkamp's power management solutions are especially beneficial for users experiencing fluctuating power demand. "Instead of using one large generator, we minimise the risk of system failure by dividing the power supply. Thanks to smartly alternating generators, engines will function at their highest efficiency levels", Menno explains. When demand is low, a single generator operates. But when demand surges, additional generators kick in, ensuring optimal power provision without any wastage. Menno: "This method not only enhances the output of a temporary power supply but also results in energy savings when synergised with the grid."

## Guaranteed power supply with frequency converters

At Vanderkamp, all pumps are driven by frequency converters that ensure the installation speeds up or slows down smoothly. This enables an efficient power supply that never overloads. Menno: "It's basically a built-in safety net ensuring reliability. When a generator encounters an issue, the pumps adapt to the available power instantaneously upholding consistent, uninterrupted operation at any demand."



## Case study: Vanderkamp's overpump installation at Carlisle, UK

At Carlisle WwTw, Vanderkamp installed an overpumping system last year. The project ran for about a year and finished recently, showing the tangible benefits of the company's power management workflow. Menno: "Before our intervention, the local water treatment facility faced recurring challenges in power surges, leading to equipment downtime and increased operational costs. Our power management system was introduced, allowing for real-time monitoring, predictive maintenance, and optimal power distribution."

The results were immediate. The facility saw a 20% reduction in energy consumption within the first three months. Also, unplanned equipment downtime dropped by 30%, leading to improved operational efficiency and considerable cost savings.

Read more about the project here: [vdkamp.eu/en/projects/carlisle-wwtw](http://vdkamp.eu/en/projects/carlisle-wwtw)

## Local collaboration is key to success

This project is just one example from Vanderkamp's portfolio in the UK. Menno emphasises that local collaborations, such as during the Carlisle installation, have led to mutual learning and system optimisation. Menno: "Together with local stakeholders, we have navigated through the complexities of integrating systems, ensuring seamless communication and alignment of customer expectations. Such collaborations are not only technical, but include knowledge sharing, understanding local regulations, and ensuring that quality, health, and safety standards are met."

## A roadmap for UK's water utilities

As stated before, Vanderkamp's power management for temporary pumping systems extends beyond the benefit of cost savings. By using real-time data analytics for efficiency optimisation, offering a concrete way to reduce environmental impact, improving asset lifespan with predictive analytics, and offering solutions particularly designed for the UK market, Vanderkamp provides us with a promising roadmap for the industry.



# Bespoke solutions for temporary pumping needs

To stay ahead of the water, we have to move just as flexibly. We think ahead and work passionately on your water issues.



Vanderkamp offers tailor made solutions for temporary pumping installations in the field of surface water, wastewater, cooling and process water, fire extinguishing water or even drinking water.

Our state of the art engineering, continuing innovation and decades of experience enables us to realise leading 'turn key' solutions.

Contact  
[rental@vdkamp.eu](mailto:rental@vdkamp.eu)  
01277 563695

More information:  
[www.vdkamp.co.uk](http://www.vdkamp.co.uk)

